LISTING OF CLAIMS:

1-15. (cancelled)

16. (previously presented) A mobile communication system using HSDPA (High Speed Downlink Packet Access) in which one physical channel is used by a plurality of mobile stations in common in a time division form and scheduling for executing radio transmission on the physical channel is conducted by a base station,

wherein the base station has a ciphering function of preventing control signals and user information directed to the mobile station from being intercepted illegally in a radio section of a RLC-TM (Radio Link Control - Transparent Mode) by using a ciphering counter, and

wherein the ciphering function constructs the ciphering counter by combining an HFN (Hyper Frame Number) and an SFN (Cell System Frame Number counter).

17. (previously presented) In a mobile communication system using HSDPA in which one physical channel is used in common by a plurality of mobile stations in a time division form, a base station for conducting scheduling to execute radio transmission on the physical channel,

wherein the base station has a ciphering function for preventing control signals and user information directed to the mobile station from being intercepted illegally in a radio section of a RLC-TM by using a ciphering counter, and

wherein the ciphering function constructs the ciphering counter by combining an HFN and an SFN.

18. (previously presented) An HSDPA transmission method using HSDPA in which one physical channel is used by a plurality of mobile stations in common in a time division form and scheduling for executing radio transmission on the physical channel is conducted by a base station,

wherein the base station executes a ciphering function for preventing control signals and user information directed to the mobile station from being intercepted illegally in a radio section of a RLC-TM by using a ciphering counter, and

wherein the ciphering function constructs the ciphering counter by combining an HFN and an SFN.

19. (previously presented) The mobile communication system according to claim 16,

wherein when constructing the ciphering counter, the ciphering function initializes the HFN on a basis of an initial value included in ciphering parameters issued by the mobile station and sets the initialized HFN in the ciphering counter.

20. (previously presented) The base station according to claim 17,

wherein when constructing the ciphering counter, the ciphering function initializes the HFN on a basis of an initial value included in ciphering parameters issued by the mobile station and sets the initialized HFN in the ciphering counter.

21. (previously presented) The HSDPA transmission method according to claim 18,

wherein when constructing the ciphering counter, the ciphering function initializes the HFN on a basis of an initial value included in ciphering parameters issued by the mobile station and sets the initialized HFN in the ciphering counter.

22. (previously presented) The mobile communication system according to claim 16,

wherein the ciphering function increases the initialized HFN with a period of the SFN.

23. (previously presented) The base station according to claim 17,

wherein the ciphering function increases the initialized HFN with a period of the SFN.

24. (previously presented) The HSDPA transmission method according to claim 18, including a step of increasing the initialized HFN with a period of the SFN.